

SYSTEM FOR CONTROLLING THE TEMPERATURE OF THE INTAKE AIR
IN INTERNAL COMBUSTION DIESEL ENGINES

ABSTRACT

5 The system is meant to heat the intake air in internal combustion Diesel
engines and is based on the use of a resistor having two segments (1) and (1')
joined to each other on one end (2), the segments (1) and (1') being made of
different metal alloys to form a thermocouple that allows using the module
10 determined by this resistor with a control circuit to automatically regulate the
temperature of the intake air, as well as to know the flow rate entering each
cylinder from a measurement of the amount of heat supplied to the air flow
entering each cylinder of the engine. The system will be disposed in
correspondence with the intake duct (4) of the corresponding engine cylinder
15 (3), where the union (2) of the segments (1) and (1') which form the resistor
must be located at the centre of said duct (4), where the air flow is greatest.